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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,216	08/29/2001	Tetsumei Tsuruoka	FUJR 18.962	6938
26304	7590	08/05/2005	EXAMINER	
KATTEN MUCHIN ROSENMAN LLP			ABELSON, RONALD B	
575 MADISON AVENUE			ART UNIT	
NEW YORK, NY 10022-2585			PAPER NUMBER	
			2666	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,216

Applicant(s)

TSURUOKA ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-7 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/24/03 & 8/29/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bala (US 6,335,992) in view of Hwang (US 6,490,260).

Regarding claims 1 and 7, Bala teaches a packet processing device for processing packets (fig. 1C).

Bala teaches a plurality of packet processors (fig. 1C stages 110, 120, 130, col. 5 lines 47-48, 54-56, 43-44) each including packet input means (fig. 1C: see input line 115 to box 121-1) to which a packet is input (data signals, col. 5 lines 32-36), internal handover means for handing over internal information of the corresponding packet processor (control signals, col. 5 lines 32-36, control signals received via the input signals, col. 4 lines 48-51), and a packet computing means for computing the input packet (produce(s) output signals, col. 5 lines 47-48, 54-56), and packet output means for outputting the computed packet (fig. 1C: see output line 125 from box 121-1). Regarding "computed packet", as previously shown, each stage switch "receives inputs" and "produces outputs" (produce(s), col. 5 lines 47-48, 54-56). The examiner corresponds the applicant's "compute" with the reference's "produce".

Bala teaches a communication line connecting said packet processors in series (fig. 1C lines 115, 125, col. 5 lines 32-36).

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Although Bala teaches each packet processor / switch contains a packet computing means for computing the input packet (produce(s) output signals, col. 5 lines 47-48, 54-56) and packet processors / switches switch inputs to outputs in accordance with internal information / control signals received from the inputs (col. 4 lines 48-51), Bala does not explicitly state a packet computing means for computing the input packet in accordance with the internal information.

Hwang teaches a packet computing means (fig. 3, receiver, FEC, CRC, col. 2 lines 11-16) for computing the input packet in accordance with the internal information / CRC bits (fig. 3, CRC bits for detecting error transmitted on control channel, col. 5 lines 41-44, perform error correction, col. 4 lines 18-24).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Bala by transmitting within the control signals of Bala, CRC bits associated with the packet data and appending FEC to the packet data. This modification can be performed according to the teachings of Hwang (fig. 3). The suggestion to modify is to provide error correction (Hwang: correct an error, col. 2 lines 45-50).

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Regarding claim 6, the internal information handover means selectively hands over the internal information (Bala: control signals, between the first stage and middle stage and between the middle stage and last stage, col. 5 lines 32-36).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bala and Hwang as applied to claim 1 above, and further in view of Phillips (US 6,438,368).

Regarding claim 4, although the combination teaches internal information handover means hands over, as the internal information / CRC bits, the combination is silent on the internal information is a computation result stored in a local register.

Phillips teaches the CRC bits are a computation result stored in a local register (fig. 2B box 48, col. 7 lines 27-31)

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Bala and Hwang by placing within each switch a CRC generator. This modification can be performed according to the teachings of Phillips. This would enable the each switch in the system to system produce CRC values corresponding to the data that the switch outputs.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bala and Hwang as applied to claim 1 above, and further in view of Hwang.

The combination, with respect to claim 1, is silent on internal information handover means sets handover timing for the internal information.

Hwang teaches internal information handover means sets handover timing for the internal information (Hwang: control channel frame has same frame time as the traffic channel frame, col. 3 lines 33-36).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Bala and Hwang by having each packet processor transmit the data signal and the corresponding control signal at the same time. This modification can be performed according to the teachings of Hwang (fig. 3). This modification would permit throughput to be increased (Hwang: col. 3 lines 46-52) .

Allowable Subject Matter

6. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

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independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (571) 272-3165. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Ronald Abelson

Examiner

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